



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/361,152	07/27/1999	SATOSHI NAKAYAMA	35.G2436	5184

5514 7590 03/29/2004

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

VILLECCO, JOHN M

ART UNIT	PAPER NUMBER
----------	--------------

2612

12

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/361,152

Applicant(s)

NAKAYAMA, SATOSHI

Examiner

John M. Villecco

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 13-18, 20 and 23-25 is/are allowed.
- 6) ☒ Claim(s) 11, 12, 19, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendments

1. Applicant has amended claims 1, 4, and 13, and added claim 25, which includes the limitation of controlling the hue or color saturation in response to the amount of flash, independently of hue or color saturation in accordance with white balance. This limitation appears to overcome the prior art.
2. Additionally, applicant has amended claim 11, to include the limitation of controlling the color control circuit in accordance with the white balance information and in accordance with the amount of light generated by the flash apparatus, respectively. Previously the claim states that the when the white balance varies in response to at least one of the illuminance of the light from the subject and the amount of light generated by the flash apparatus, the color control circuit controls hue and saturation. This new added limitation seems to claim that when the white balance varies according to the illuminance of the light, the white balance information is used in the color correction, and when the amount of light generated by the flash apparatus is used, information in accordance with the amount of light generated by the flash apparatus is used in the color correction. Juen, however, teaches that based upon the illuminance detected by the white balance control circuit (24), the color correction circuit (31) adjusts the hue based upon the white balance information. Therefore, Juen discloses correcting the hue using white balance information which varies in response to the illuminance of the subject. The fact that the color is not corrected based upon the amount of light generated by the flash apparatus is irrelevant since

Art Unit: 2612

the claim states that the white balance information varies in response "to at least one of" the illuminance of the light or the amount of light generated by the flash apparatus. Therefore, the rejection of claim 11 from the previous office action will be repeated below.

3. As for claims 21 and 22, applicant has amended the claims, thus necessitating a new search and a new grounds of rejection. Please see the new grounds of rejection presented below.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claim 11 is rejected under 35 U.S.C. 102(e) as being anticipated by Juen (U.S. Patent No. 6,459,449).**

6. As for *claim 11*, Juen discloses a white balance control circuit (23) for controlling the white balance of an image signal according to a detected illuminance generated by the white balance setting control circuit (24). The system includes the use of a white balance control circuit (24) for detecting the amount of white balance in the surrounding environment. The amount of white balance in a surrounding environment is equated to the amount of illuminance. A set of adders (28 and 29) act as the color adjusting means since they act as the means for correcting the color based upon a determined coefficient generated by the correction matrix

Art Unit: 2612

coefficient generating circuit (31). The correction matrix coefficient generating circuit (31) acts as the hue controlling means since it controls the operation of the adders. The information generated by the correction matrix coefficient generating circuit (31) is generated based upon the detected illuminance from the white balance setting control circuit (24). Juen, however, teaches that based upon the illuminance detected by the white balance control circuit (24), the color correction circuit (31) adjusts the hue based upon the white balance information. Therefore, Juen discloses correcting the hue using white balance information which varies in response to the illuminance of the subject. The fact that the color is not corrected based upon the amount of light generated by the flash apparatus is irrelevant since the claim states that the white balance information varies in response "to at least one of" the illuminance of the light or the amount of light generated by the flash apparatus.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juen (U.S. Patent No. 6,459,449) in view of applicant's admitted prior art as indicated in the specification.**

9. Regarding *claim 12*, as mentioned above in the discussion of claim 11, Juen discloses all of the limitations of the parent claim. However, Juen fails to disclose that the color adjusting

Art Unit: 2612

means includes a matrix circuit with a construction as defined by the claim. Applicant, on the other hand, shows prior art on page 5 of the specification that discloses that the linear matrix circuit (209) multiplies a first color difference signal by a factor and then adds it to the other color difference signal and multiplies the second color difference signal by a factor and adds it to the first color difference signal. By performing the adjustment in such a manner so that the optimal color signal is generated. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the color correction in such a manner so that an image is generated with accurate color characteristics.

10. As for *claim 19*, as mentioned above in the discussion of claim 11, Juen discloses all of the limitations of the parent claim. Additionally, Juen discloses the ability to correct for different lighting types. However, Juen fails to specifically disclose that the flash is incorporated in the image pickup apparatus. Applicant however, discloses an image system in the prior art that corrects for the hue based on a flash (214) that is incorporated in the camera body. By incorporating a flash in the camera body the user does not have to set and determine optimal lighting conditions. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a flash apparatus in the camera body so the user is able to perform a flash operation without a lot of difficulty with setting up lights or worrying about if there is enough light for proper exposure.

11. **Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's own admitted prior art as indicated in the specification and further in view of Juen (U.S. Patent No. 6,459,449).**

Art Unit: 2612

12. Regarding *claim 21*, applicant discloses in the specification on pages 2-6 a prior art image pickup apparatus which includes a color adjusting circuit and a color controlling circuit. More specifically, the apparatus includes a linear matrix (209) and a gains control circuit (210) which act as the color adjusting circuit. The hue correction circuit (213) acts as the color controlling circuit. Based upon whether a flash is used or not the color adjusting circuit corrects the hue. See page 5 of the specification.

Applicant however, fails to specifically disclose using first data when the flash is used and second data when the flash is not used. Juen, on the other hand, discloses that it is well known in the art to store correction data in a ROM for use in subsequent color correction. More specifically, Juen discloses a correction table memory ROM (9) for storing matrix constants for a plurality of light sources. See column 12, lines 16-26. The use of the ROM for storing a plurality of data allows for data for each determined light source to be sent to the color correction matrix, thus ensuring a quality image based on the type of inferred light. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to two different sets of data for color correction with flash and without flash so that a high quality image is formed taking into account the type of lighting conditions.

13. As for *claim 22*, applicant discloses in the specification on pages 2-6 a prior art image pickup apparatus which includes a color adjusting circuit and a color controlling circuit. More specifically, the apparatus includes a linear matrix (209) and a gain control circuit (210) which act as the color adjusting circuit. Based upon the color temperature, which is determined by the white balance control circuit, the hue is controlled by the linear matrix and the gain control

Art Unit: 2612

circuit (210). Furthermore when a flash is used the hue correction circuit (213) operates to control the hue of image signal. See pages 4 and 5 of the specification.

Applicant however, fails to specifically disclose using first data when the flash is used and second data when the flash is not used. Juen, on the other hand, discloses that it is well known in the art to store correction data in a ROM for use in subsequent color correction. More specifically, Juen discloses a correction table memory ROM (9) for storing matrix constants for a plurality of light sources. See column 12, lines 16-26. The use of the ROM for storing a plurality of data allows for data for each determined light source to be sent to the color correction matrix, thus ensuring a quality image based on the type of inferred light. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to two different sets of data for color correction with flash and without flash so that a high quality image is formed taking into account the type of lighting conditions.

Allowable Subject Matter

14. Claims 1-10, 13-18, 20, and 23-25 are allowed.

15. Regarding *claim 1*, the primary reason for allowance is that the prior art fails to teach or reasonably suggest a first color control circuit which controls the color adjusting circuit so that at least one of hue or color saturation is corrected responsive to the amount of flash generated light, independently of hue and/or color saturation in accordance with white balance.

16. As for *claim 4*, the primary reason for allowance is that the prior art fails to teach or reasonably suggest a first color control circuit which controls the color adjusting circuit so that at

Art Unit: 2612

least one of hue or color saturation is corrected responsive to the illuminance of the light, independently of hue and/or color saturation in accordance with white balance.

17. With regard to *claim 7*, the primary reason for indication of allowance is that the prior art fails to teach or reasonably suggest a first and second color controlling circuit.

18. As for *claim 9*, the primary reason for indication of allowance is that the prior art fails to teach or reasonably suggest a second hue controlling means for adjusting the hue based on whether or not a flash is used.

19. With regard to *claim 13*, the primary reason for allowance is that the prior art fails to teach or reasonably suggest a first color control circuit which controls the color adjusting circuit such that when a flash apparatus is used, said color adjusting circuit corrects at least one of hue or color saturation responsive to the illuminance of the light from the subject using the flash apparatus, independently of hue and/or color saturation in accordance with white balance.

20. Regarding *claim 25*, the primary reason for allowance is that the prior art fails to teach or reasonably suggest a color control circuit for changing the color adjusting circuit such that the color adjusting circuit corrects at least one of hue and color saturation in response to first data when a flash apparatus is used and in response to second data when the flash apparatus is not used, independently of hue and/or color saturation control in accordance with white balance.

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2612

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any response to this final action should be mailed to:

Box AF
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-6306, (for formal communications; please mark "**EXPEDITED PROCEDURE**"; for informal or draft communications, please label "**PROPOSED**" or "**DRAFT**")

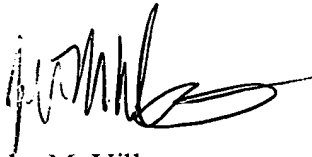
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (703) 305-1460. The examiner can normally be reached on Monday through Thursday from 7:00 am to 5:30 pm EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber, can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2612

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service desk whose telephone number is (703) 306-0377.



John M. Villecco
3/10/04



WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600